

WHAT IS CLAIMED IS:

1. An optical disk comprising:

having tracks in which a header region at which  
positional information showing a recorded position is  
5 recorded and a user region at which user information is  
recorded are alternately arranged, and in which the  
user region is made to wobble in a direction  
perpendicular to the arranging direction; and

having a first region in which at least one of  
10 a phase, a frequency, and an amplitude of the wobble is  
different from the other portions is formed at  
a portion a given length before the header region in  
playback order within the user region.

2. An optical disk according to claim 1, wherein  
15 the header region is formed such that positions of  
headers are shifted along the arranging direction of  
the tracks between the tracks which are adjacent to one  
another.

3. An optical disk according to claim 2, wherein  
20 the positional information has been recorded at the  
header region by a pre-pit and the user information can  
be recorded by marks due to changes of the phase at the  
user region.

4. An optical disk according to claim 2, wherein  
25 the user region is structured from groove tracks formed  
from physical concave portions or convex portions, and  
land tracks formed between the groove tracks which are

adjacent to one another.

5           5. An optical disk according to claim 2, wherein  
a second region in which at least one of a phase,  
a frequency, and an amplitude of the wobble is  
different from the other portions except for the first  
region is formed at a portion a given length before the  
first region in playback order within the user region.

10           6. An optical disk according to claim 5, wherein  
an interval between the first region and the second  
region is set in accordance with a length in which the  
positions of the headers at the header region are  
shifted along the arranging direction of the tracks  
between the tracks which are adjacent to one another.

15           7. An optical disk comprising:  
having tracks in which a header region at which  
positional information showing a recorded position is  
recorded by a pre-pit and a user region at which user  
information is recorded are alternately arranged, and  
in which the user region is made to wobble in  
20 a direction perpendicular to the arranging direction;  
and

          having a region in which a phase of the wobble is  
inverted to the other portions at a portion a given  
length before the header region in playback order  
25 within the user region.

8. An optical disk apparatus comprising:  
an optical disk which is structured such that

tracks are formed in which a header region at which  
positional information showing a recorded position is  
recorded and a user region at which user information is  
recorded are alternately arranged, and in which  
5 the user region is made to wobble in a direction  
perpendicular to the arranging direction, and a first  
region in which at least one of a phase, a frequency,  
and an amplitude of the wobble is different from the  
other portions is formed at a portion a given length  
10 before the header region in playback order within the  
user region;

a light detecting portion which is structured so  
as to obtain an electrical signal corresponding to the  
information recorded on the optical disk by condensing  
15 a light beam on the optical disk via an objective lens;  
and

a detecting portion which is structured so as to  
detect the first region on the basis of the electrical  
signal obtained at the light detecting portion.

20 9. An optical disk apparatus according to  
claim 8, further comprising:

a control portion which is structured so as to  
control the objective lens in a tracking direction by  
a tracking error signal with respect to the objective  
25 lens which is generated on the basis of the electrical  
signal obtained at the light detecting portion; and

a holding portion which is structured so as to

hold the tracking error signal supplied to the control portion in accordance with the first region being detected by the detecting portion.

5       10. An optical disk apparatus according to claim 8, further comprising:

          a generating portion which is structured so as to generate a gate signal showing a playback timing of the header region in accordance with the first region being detected by the detecting portion, wherein

10       the information at the header region is played back from the electrical signal obtained at the light detecting portion on the basis of the gate signal generated at the generating portion.